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09/486,973 03/06/00 SAKAI

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EXAMINER

IM22/0709

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ART UNIT

PAPER NUMBER

1755

DATE MAILED:

07/09/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.

09/486,973

Applicant(s)

Sasai et al

Examiner

Michael Marcheschi

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some\* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3 20) ☐ Other:

Art Unit: 1755

Claims 1-3 and 5-8 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 5 are indefinite as to the phrase “an additive **containing**” because this does not properly define the additive. Is the additive a metal oxide, a metal chloride, a metal sulfate or a metal nitrate. If so, the claims should be rewritten without the “containing” limitation defined in the above phrase .

Claim 2 is indefinite because it depends on an indefinite claim.

Claims 3 and 7 are indefinite because it appears that the additive **must** be present in the composition but the claims recite “0.15% or **less**” which can mean that said additive in **not present**. In view of this, the scope of the claims are unclear because it is apparent that some of the additive must be present. In addition, it is apparent from the specification that the amount of the additive being zero (none present) is not applicants invention. A lower limit for the amount should be defined.

Claims 5 and 8 are indefinite as to the phrase “other metallic materials” because the examiner is unclear as to what this encompasses, thus rendering the scope of the claims unclear.

Claim 6 is indefinite because it depends on an indefinite claim.

Claim 8 is also indefinite as to the phrase “is incorporated” because this phrase does not make sense in the context of the claim.

Art Unit: 1755

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over either (1) Cheng et al., (2) Penrod or (3) Higby et al..

~~Cheng~~ et al. teach in column 6, line 57-column 7, line 60 and the claims, a soda-lime glass batch comprising  $\text{Na}_2\text{SO}_4$  and an additive which is within the scope of the claimed additives.

~~Penrod~~ teaches a soda-lime glass batch comprising  $\text{Na}_2\text{SO}_4$  and an additive which is within the scope of the claimed additives.

~~Higby~~ et al. teach a soda-lime glass batch comprising  $\text{Na}_2\text{SO}_4$  and an additive which is within the scope of the claimed additives.

The claimed invention is anticipated by the references because said references teach soda-lime glass batches comprising  $\text{Na}_2\text{SO}_4$  and an additive which is within the scope of the claimed

Art Unit: 1755

additives. In the alternative, no distinction is seen to exist between the references and the claimed invention in the absence of any evidence showing the contrary.

Claims 1-3 and 5-7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over either (1) Boulos et al., (2) EP 823,404 or (3) Amrhein et al.

Boulos et al. teach, especially in the claims, a soda-lime glass batch comprising  $\text{Na}_2\text{SO}_4$  and an additive which is within the scope of the claimed additives.

EP 823,404 teach, especially in the claims, a soda-lime glass batch comprising  $\text{Na}_2\text{SO}_4$  and an additive which is within the scope of the claimed additives.

Amrhein et al. teach in column 3, line 20-column 4, line 51 and the claims, a soda-lime glass batch comprising  $\text{Na}_2\text{SO}_4$  and an additive which is within the scope of the claimed additives. It is also set forth that it is well known to replace a portion of the  $\text{Na}_2\text{SO}_4$  in soda lime glass batches with a nitrate because this replacement is known to suppress sulfurous emissions.

The claimed invention is anticipated by the references because said references teach soda-lime glass batches comprising  $\text{Na}_2\text{SO}_4$  and an additive which is within the scope of the claimed additives. In the alternative, no distinction is seen to exist between the references and the claimed invention in the absence of any evidence showing the contrary.

Art Unit: 1755

Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as obvious over Amrhein et al.

The reference teaches that a portion of the  $\text{Na}_2\text{SO}_4$  in the soda lime glass batch is replaced with a nitrate because this replacement suppresses sulfurous emissions. The amount of replacement would have been obvious to one skilled in the art in order to minimize sulfurous emissions during manufacturing of the glass without compromising the desired composition of the batch material (i.e. the sodium content, etc.). In addition, the reference broadly states that this replacement is made and since no specific percentages are defined, it is the examiners position that since the reference fails to mention any specific replacement rate (criticality), this (the absence of any such limitation) constitutes a broad teaching of replacement rates, as long as a final soda-lime batch is obtained. In view of this, it can be reasonably interpreted that the claimed replacement rate is encompassed by the broad teachings according to this reference in the absence of any evidence showing the contrary (criticality). One skilled in the art would have knowledge of the useable replacement rates in view of the teachings according to this reference.

Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as obvious over either (1) Boulos et al. in view of Amrhein et al. or (2) EP 823,404 in view of Amrhein et al.

It is the examiners position that it would have been obvious to replace a portion of the  $\text{Na}_2\text{SO}_4$  in the batches according to Boulos et al. or EP 823,404 because Amrhein et al. teaches that it is well known to replace a portion of the  $\text{Na}_2\text{SO}_4$  in soda lime glass batches with a nitrate in order to suppress sulfurous emissions. The amount of replacement would have been obvious to

Art Unit: 1755

one skilled in the art in order to minimize sulfurous emissions during manufacturing of the glass without compromising the desired composition of the batch material (i.e. the sodium content, etc.). In addition, this reference broadly states that this replacement is made and since no specific percentages are defined, it is the examiners position that since the reference fails to mention any specific replacement rate (criticality), this (the absence of any such limitation) constitutes a broad teaching of replacement rates, as long as a final soda-lime batch is obtained. In view of this, it can be reasonably interpreted that the claimed replacement rate is encompassed by the broad teachings according to this reference in the absence of any evidence showing the contrary (criticality).. One skilled in the art would have knowledge of the useable replacement rates in view of the teachings according to this reference.

In view of the teachings as set forth above, it is the examiners position that the references reasonably teach or suggest the limitations of the rejected claims.

**"A reference is good not only for what it teaches but also for what one of ordinary skill might reasonably infer from the teachings. *In re Opprecht* 12 USPQ 2d 1235, 1236 (CAFC 1989); *In re Bode* USPQ 12; *In re Lamberti* 192 USPQ 278; *In re Bozek* 163 USPQ 545, 549 (CCPA 1969); *In re Van Mater* 144 USPQ 421; *In re Jacoby* 135 USPQ 317; *In re LeGrice* 133 USPQ 365; *In re Preda* 159 USPQ 342 (CCPA 1968)". In addition, "A reference can be used for all it realistically teaches and is not limited to the disclosure in its preferred embodiments" See *In re Van Marter*, 144 USPQ 421.**

Art Unit: 1755

**"A generic disclosure renders a claimed species prima facie obvious. *Ex parte George* 21 USPQ 2d 1057, 1060 (BPAI 1991); *In re Woodruff* 16 USPQ 2d 1934; *Merk & Co. v. Biocraft Lab. Inc.* 10 USPQ 2d 1843 (Fed. Cir. 1983); *In re Susi* 169 USPQ 423 (CCPA 1971)".**

Evidence of unexpected results must be clear and convincing. *In re Lohr* 137 USPQ 548.  
Evidence of unexpected results must be commensurate in scope with the subject matter claimed.  
*In re Linder* 173 USPQ 356.

The additional references cited on the 1449 have been reviewed by the examiner and are considered to be art of interest since they are cumulative to or less than the art relied upon in the above rejections.

Any foreign language documents submitted by applicant has been considered to the extent of the short explanation of significance, English abstract or English equivalent, if appropriate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Marcheschi whose telephone number is (703) 308-3815. The examiner can be normally be reached on Monday through Thursday between the hours of 8:30-6:00 and every other Friday between the hours of 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiners supervisor, Mark L. Bell, can be reached at (703) 308-3823.

Amendments can also be sent by fax to the numbers set forth below:

For after final amendments, the fax number is (703) 872-9311;

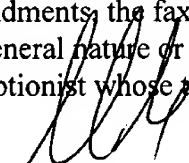
For non-final amendments, the fax number is 703 872-9310.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Michael Marcheschi

Art unit 1755

7/01

  
MICHAEL MARCHESCHI  
PRIMARY EXAMINER